

SPAIN
PALOMARES

COPY

HALL-OTERO
AGREEMENT

El Presidente
de la
Junta de Energia Nuclear

Madrid, 25th February 1966

Dear Dr. Hall:

Thank you for your letter of the 25th February regarding the expansion of our collaboration in the fields of Health and Safety, in accordance with the Agreement for Cooperation for civil Uses of Atomic Energy between Spain and the United States.

I have the pleasure to inform you that the Minister of Industry has authorized the Junta de Energia Nuclear to accept the proposal, on the terms stated in your letter and details contained in the enclosure thereto. I am confident that this work will contribute to improve even more the relations between our organizations.

Sincerely

/S/ J.M. Otero

J. M. Otero

TAB B

Madrid, Spain,
February 25, 1966

Dear Professor Otero:

Pursuant to our Agreement for Cooperation for Civil Uses of Atomic Energy between Spain and the United States I wish to propose that we expand our collaboration in the fields of health and safety. Accordingly, on behalf of the United States Atomic Energy Commission and in accordance with the relevant articles in our Agreement for Cooperation of August 16, 1957, as amended, I suggest we investigate various health and safety aspects of fissionable materials when released into a rural agricultural environment.

Collaborative investigations shall be initiated as soon as possible of the physiological and ecological behavior of plutonium oxide in a previously contaminated rural area that has been decontaminated in accordance with mutually agreed upon decontamination limits and procedures. More specifically the investigations shall consist of the points I have set forth in the attached annex to this letter. "

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It is understood that information considered essential to our collaboration shall be shared freely by the two agencies as well as all information derived from these investigations. It is further understood that the results derived shall not be released to the public without the concurrence of the two agencies.

If these proposals are acceptable to you, I suggest that this letter and your letter of acceptance shall constitute an understanding on these subjects between our two agencies.

Sincerely, .

/s/ John A. Hall

John A. Hall
Assistant General Manager for
International Activities
ATOMIC ENERGY COMMISSION

Excmo. Sr. D. José María Otero Navascues.
Marques de Hermosilla,
Presidente de la Junta de
Energía Nuclear,
Avenida Complutense 22,
Ciudad Universitaria

Enclosure: Annex

A N N E X

1. Collection of **information** on uptake and retention of **plutonium** and uranium by **representative** numbers of a **population** group potentially **exposed** to Inhalation of a plutonium oxide aerosol,
2. **measurement of temporal and** seasonal fluctuations **in** plutonium air concentrations **above a** plutonium oxide contaminated agricultural area that has been subjected to the agreed upon decontamination procedures,
3. serial measurements of **contamination levels** (both by plant uptake **from the soil and wind** dispersal) "of agricultural products produced **in a contaminated** area subsequent to decontamination, **and DOE ARCHIVES**
4. studies of **the** temporal migration and redistribution of **plutonium** oxide **in soil**, decontaminated by deep plowing, as a result of continued cultivation and weathering.

The Junta will assume the position of principal investigator with the U. S. A.E. C. providing support in the form of technical assistance and advice and specialized equipment and materials not readily available to the Junta.

In the role of principal Investigator the Junta will assume responsibility for the following:

1. Provision of building and laboratory space required to initiate and carry on the program.
2. Establishment, with the help of U.S. specialists, of sampling methods, routines and schedules for population, air, produce and soil measurements.
3. Provision of logistic support required by sampling and measuring schedules.
4. Performance of all scientific measurements and tests.
5. Compilation and documentation of all scientific data.
6. Provision of travel for its own specialists sent to the United States for consultation, planning or training purposes.

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In **the role of secondary** Investigator, the- U. S. A. E. C.
will assume responsibility for the following:

1. Provision, either through **funding** or by transfer, of **specialized** equipment and **material** required by the program. **During** the *first year* this **will** consist of:

- a. A whole body **counter**, complete with **crystal** spectrometer and **plutonium** X-ray detector.
- b. One (8place) scintillation **alpha** counter of the type currently in use at the Los **Alamos Scientific** Laboratory **or** the New York **Health and Safety Laboratory**. DOE ARCHIVES
- c. One alpha spectrometer complete with **multi-channel** analyzer and data read-out equipment.
- d. Additional, **less** specialized **equipment**, such as analytical balances, centrifuges, special chemicals, etc., **in** the amount of **approximately** \$15,000.
- e. **Plutonium** and **uranium** analytical standards.
- f. Four generator-powered **Hi-Vol** air samplers of the latest design for continuous **field** operation.

2. **Provision of a visiting specialist-.ta install and calibrate** the whole body counter and to train Junta personnel **in** its use.
3. **Provision of visiting specialists in** methods of plutonium and uranium analysis, **to install** specialized analytical equipment and train Junta personnel **in** techniques of plutonium and uranium measurement which are **used in the** United States, **published** and unpublished.
4. **Provision of a visiting specialist in** soil and plant sciences to **help develop** the studies of plutonium **translocation** in the **soil** and **its** uptake by cultivated crops.
5. Continued provision, beyond **the first** year, of specialized equipment, technical assistance and advice for as long as both parties **mutually** agree to be desirable on **the basis** of the observations as they are **obtained**.

DOE ARCHIVES

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de la
Junta de **Energía** Nuclear

Madrid, 25th February 1966

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Sincerely,

/s/ José Ma ^{DOE ARCHIVES}
Otero